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## **Perception of Visuotactile Illusion Decreases with Age**

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Visuotactile illusions arise when visual and somatosensory input are in conflict. Central processes must somehow make sense of these conflicting inputs, and sometimes this results in an illusion that simply does not make sense, but nonetheless is real in the mind of the subject. V.S. Ramachandran has described illusions that arise when an experimenter strokes and taps a tabletop in full view of the subject, while synchronously stroking and tapping the subject's hand (which is not in view). The illusion that sometimes arises from this scenario is described variously as "the hand is touching my hand through the tabletop" or "the tabletop is a part of my body". We have explored several aspects of this illusion and have been able to show that the ability of subjects to perceive the illusion diminishes with age. The most dramatic change occurs between the 20's and 30's, when the positive responses drop from 51.7% to 22.2%. Secondly, while it seemed to us that females consistently were able to perceive the illusion more often than males, we could not statistically show this to be true ( $p = 0.07$ ). We also suspected that experimenter bias was a potential problem, since the initial data recorded by Harness, Gensic, Sorg, and Evans were obtained by female experimenters only. Therefore, we collected more data using only male experimenters, only to find that it apparently does not make a difference which gender is involved in collecting data. Overall, we found that 43% of persons aged 10-59 are able to perceive the tabletop illusion.